

IN THE CLAIMS:

1. (Currently amended) A method for detecting a toxicant of interaction between two or more binding partners in an aquatic, terrestrial, gaseous or industrial environmental sample, wherein at least one of said binding partners is a nucleic acid molecule and is immobilized to a substrate comprising glass, polystyrene, polymethacrylate, cellulose, nylon, polyvinylchloride or polypropylene, said method comprising contacting ~~the binding partners~~ before, during or after said partners have formed a binding partnership the immobilized nucleic acid molecule with said sample putatively containing said toxicant; and screening for either dissociation of binding between ~~said binding partners~~ a binding partner and said immobilized nucleic acid molecule, or inhibition of binding ~~between said binding partners~~ a of binding partner to said immobilized nucleic acid molecule, wherein said dissociation or inhibition of binding is indicative of the presence of said toxicant.

2. (Cancelled)

3. (Previously presented) A method according to Claim 1 wherein the toxicant is a heavy metal, a heavy metal ion, an organic compound or an organo-halide.

4. (Currently amended) A method according to Claim 1 wherein a said binding partner of said immobilized nucleic acid molecule is comprises a protein or a nucleic acid molecule.

5. (Currently amended) A method according to Claim ~~1~~ 4 wherein ~~the~~ said binding partner of said immobilized nucleic acid molecule is an enzyme.

6. (Currently amended) A method according to Claim 1 wherein ~~the~~ said binding partner of said immobilized nucleic acid molecule is a substrate of an enzyme.

7. (Currently amended) A method according to Claim 1 wherein ~~a~~ said binding partner of said immobilized nucleic acid molecule comprises a sulfhydryl group.

8-10. (Cancelled)

11. (Currently amended) A method according to Claim 1 wherein ~~the solid support~~ said substrate is polystyrene or polymethacrylate.

12-33. (Canceled)

34. (New) A method according to Claim 1 wherein said binding partner of said immobilized nucleic acid molecule comprises a dye.